Amendments to the Specification:

Please replace the existing paper copy of the sequence listing in the application with the enclosed paper copy of the sequence listing.

Please replace the paragraph that starts with "FIG. 3 shows" on page 4 of the application with the following amended paragraph:

FIG. 3 shows the nucleic acid (SEQ ID NO:2) and amino acid ~~(SEQ ID NO:7)~~ (SEQ ID NO:3) sequence of BLV Tax;

Please replace the paragraph that starts with "FIG. 4 shows" on page 4 of the application with the following amended paragraph:

FIG. 4 shows the nucleic acid sequence of the HTLV promoter ~~(SEQ ID NO:4)~~ (SEQ ID NO:6);

Please replace the paragraph that starts with "FIG. 5 shows" on page 4 of the application with the following amended paragraph:

FIG. 5 shows the nucleic acid ~~(SEQ ID NO:3)~~ (SEQ ID NO:4) and the amino acid ~~(SEQ ID NO:8)~~ (SEQ ID NO:5) of HTLV Tax;

Please replace the paragraph that starts with "FIG. 6 shows" on page 4 of the application with the following amended paragraph:

FIG. 6 shows the nucleic acid sequence of the HIV promoter ~~(SEQ ID NO:5)~~ (SEQ ID NO:7);

Please replace the paragraph that starts with "FIG. 7 shows" on page 4 of the application with the following amended paragraph:

FIG. 7 shows the nucleic acid ~~(SEQ ID NO:6)~~ (SEQ ID NO:8) and amino acid (SEQ ID NO:9) of HIV Tat;

Please replace the paragraph that starts with "FIG. 10 shows" on page 4 of the application with the following amended paragraph:

FIG. 10 shows the nucleic acid sequence of pLBC-BTaxW (SEQ ID NO:10 for the upper strand and SEQ ID NO:13 for the lower strand) and the three amino acid sequences labeled as BLAST, BTax, and AMP are provided in the sequence listing as SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO:14, respectively;

Please replace the paragraph that starts with "FIG. 12 shows" on page 4 of the application with the following amended paragraph:

FIG. 12 shows the nucleic acid sequence of pLNBLV-M4W ~~(SEQ ID NO:11)~~ (SEQ ID NO:15 for the upper strand and SEQ ID NO:18 for the lower strand) and the three amino acid sequences labeled as Neomycin Phosphotransferase, Brex M4, and b-Lactamase are provided in the sequence listing as SEQ ID NO:16, SEQ ID NO:17, and SEQ ID NO:19, respectively;

Please replace the paragraph that starts with "FIG. 14 shows" on page 4 of the application with the following amended paragraph:

FIG. 14 shows the nucleic acid sequence of pLNBIv-YFP ~~(SEQ ID NO:12)~~ (SEQ ID NO:20 for the upper strand and SEQ ID NO:23 for the lower strand) and the three amino acid sequences labeled as Neomycin Phosphotransferase, EYFP, and b-Lactamse are provided in the sequence listing as SEQ ID NO:21, SEQ ID NO:22, and SEQ ID NO:24, respectively;

Please replace the paragraph that starts with "FIG. 16 shows" on page 4 of the application with the following amended paragraph:

FIG. 16 shows the nucleic acid sequence of pLNHiv-YFP ~~(SEQ ID NO:13)~~ (SEQ ID NO:25 for the upper strand and SEQ ID NO:28 for the lower strand) and the three amino acid sequences labeled as NEO, YFP, and AMP are provided in the sequence listing as SEQ ID NO:26, SEQ ID NO:27, and SEQ ID NO:29, respectively;

Please replace the paragraph that starts with "In some embodiments" on page 16 of the application with the following amended paragraph:

In some embodiments, the vectors may utilize the following items: 5' LTR (e.g., MoMSV); extended packaging region; NEO; retroviral promoter (e.g., BLV); gene of Interest; 3'LTR (e.g., MoMuLV). Exemplary vectors of the present invention comprising YFP (yellow fluorescent protein) or M4 as an exemplary gene of interest are shown in FIGS. ~~14-16 (SEQ ID NOs: 12 and 13)~~ 11-16 (SEQ ID NOs: 15, 20, and 25). FIG. [[14]] 11 shows a map of a construct that further comprises a WPRE element.

Please replace the paragraph that starts with "The expression vectors" on page 20 of the application with the following amended paragraph:

The expression vectors and systems of the present invention may utilize inducers (e.g., transactivators). In preferred embodiments, the inducers are specific for the activation domain of the promoter chosen. For example, in some embodiments, the BLV promoter is activated with the BLV Tax inducer protein ~~(SEQ ID NO:2)~~ (SEQ ID NO:3). In other embodiments, the HTLV-1 promoter ~~(SEQ ID NO:3)~~ (SEQ ID NO:6) is activated by HTLV Tax protein ~~(SEQ ID NO:4)~~ (SEQ ID NO:5) and the HIV promoter ~~(SEQ ID NO:5)~~ (SEQ ID NO:7) is activated by the HIV Tat inducer protein ~~(SEQ ID NO:6)~~ (SEQ ID NO:9). In some embodiments, the HIV Tat protein is engineered to activate the BLV promoter (e.g., via site directed mutagenesis; See e.g., below discussion of engineered mutants).

Please replace the paragraph that starts with "FIGS. 10-13 show" on page 22 of the application with the following amended paragraph:

FIGS. ~~10-13~~ 9 and 10 show an exemplary ~~vectors~~ vector for the expression of Tax inducer protein (~~SEQ ID NOs: 10 and 11~~ SEQ ID NO:10)~~. FIG. 12 shows an example of a vector further~~ comprising a WPRE element. The present invention is not limited to the particular constructs shown in FIGS. ~~10-13~~ 9 and 10. Additional vectors for the expression of inducer proteins may be utilized (See e.g., above description of vectors).

Please replace the paragraph that starts with "Two different promoter constructs" and bridges pages 25 and 26 of the application with the following amended paragraph:

Two different promoter constructs were analyzed in this example. Table 1 shows the constructs utilized in the experiments below and the geometric mean brightness values from FACS analysis. The BLV promoter was compared to the immediate early promoter of cytomegalovirus (CMV), a known strong promoter for mammalian expression systems. Two reporter constructs were used, LNBIv-YFP (~~SEQ ID NO:13~~ FIG. 13), which contains the gene for yellow fluorescent protein (YFP) under the control of the BLV promoter, and LNC-YFP, which contains the gene for YFP under the control of the CMV promoter. The reporter constructs utilize the Neo selectable marker. Two inducer constructs were used, LBC-BTax (~~SEQ ID NO:10~~ FIG. 9), which contains the gene for BLV Tax under control of the CMV promoter, and LBC-BTaxW, which is the same as LBC-BTax, with the addition of the WPRE in the 3' UTR of the BTax gene. The addition of the WPRE sequence to the Tax message is contemplated to increase Tax protein expression and lead to higher induction of the BLV promoter. D17 (canine osteogenic sarcoma) cells were then transduced with these vectors in the combinations shown in Table 1. Promoter strength was qualitatively and quantitatively evaluated by fluorescence activated cell sorting (FACS) and Western blot analysis, respectively, measuring yellow fluorescent protein (YFP) expression in cells transfected with the various vectors. The amount of YFP expression observed was directly proportional to promoter strength and, therefore, gene expression levels.